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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,299	01/28/2004	Patrick Joseph Derks	50037.204US01	4999
27488 7590 07/16/2007 MERCHANT & GOULD (MICROSOFT) P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER MARIAM, DANIEL G	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/767,299

Applicant(s)

DERKS ET AL.

Examiner

DANIEL G. MARIAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,12-19,21 and 22 is/are rejected.
- 7) ☒ Claim(s) 3,9-11,20 and 23-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/30/04.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Examiner's Note***

1. Examiner has cited particular columns and line numbers or figures in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

### ***Claim Objections***

2. Claims 12-18 are objected to because of the following informalities: independent claim 12 contains two periods. Each claim must begin with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations. See *Fressola v. Manbeck*, 36 USPQ2d 1211 (D.D.C. 1995) (See MPEP 608.01(m)). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (6,898,764).

5. With regard to claim 19, Kemp discloses a target user interface device (computer system 10, in Fig. 1) that includes a first application, i.e., GUI objects generator, that is configured to: take a first, i.e., existing or pre-stored, snapshot of a user interface, i.e., GUI, on a target device during a first automation execution, take a second, i.e., current, snapshot of the user interface on the target device during a second automation execution, store the first snapshot and the second snapshot (See items 102 and 104, in Fig. 4. Both GUI's are stored in memory (12) in Fig. 1); a host device that includes a second application that is configured to upload the first snapshot and the second snapshot (See item 26, in Fig. 1); and a server that includes a third application that is configured to: receive the first snapshot and the second snapshot, compare a property, i.e., objects, of the first snapshot to corresponding property of the second snapshot, and produce an output of the difference between the first snapshot and the second snapshot (See item 28, in Fig. 1; and item 106, in Fig. 4). Although Kemp does not extensively elaborate having a host and a server as a separate entity, Kemp mentions such a possibility (See for example, the discussion made on col. 3, line 60 – col. 4, line 9), and thus it would have been obvious to one having ordinary skill in the art to configure the system shown in Figure 1 in a client-server environment.

With regard to claim 21, the system of claim 19, wherein the comparison of the property of the first snapshot to the corresponding property of the second snapshot provides a pass/fail, i.e., add/remove variable (Which broadly reads on items 108 and 110).

6. Claims 1-2, 4-8, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemp (6,898,764) in view of Hsu (6,138,270).

With regard to claim 1, Kemp discloses a computer-implemented method for user interface testing (See for example, Fig. 4), comprising: taking a first, i.e., existing or pre-stored,

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snapshot of a user interface on a target device during a first automation execution (See for example, item 102, in Fig. 4; and col. 4, line 14-57); taking a second, i.e., current, snapshot of the user interface on the target device during a second automation execution (See for example, item 104, in Fig. 4; and col. 4, line 14-57); comparing pixels of the first snapshot to corresponding pixels of the second snapshot (See for example, item 106, in Fig. 4); and producing a (visual) output of the difference between the first snapshot and the second snapshot (See for example, item 108 and/or 108; and col. 4, lines 54-55). While Kemp produces a generic output of the difference between the two GUI by displaying a message in response to the difference, Kemp does not specifically use the language displaying a visual output of the difference. However, Hsu (See for example, Fig. 4) teaches this feature. Kemp and Hsu are combinable because they are from the same field of endeavor, i.e., finding differences between two user interfaces (See for example, item 108, in Fig. 3). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Hsu with Kemp. The motivation for doing so would at least provide a visual output of the resulting difference between the two user interfaces (See for example, Fig. 4). Therefore, it would have been obvious to combine Hsu with Kemp to obtain the invention as specified in claim 1.

With regard to claim 2, the computer-implemented method of claim 1, further comprising storing the first snapshot and the second snapshot on the target device (See for example, item 12, in Fig. 1 of Kemp).

With regard to claim 4, the computer-implemented method of claim 1, further comprising uploading the first snapshot and the second snapshot to a server using an export tool, i.e., link (See for example, col. 3, line 60 – col. 4, line 9; and item 32, in Fig. 1 of Kemp).

With regard to claim 5, the computer-implemented method of claim 4, wherein the export tool is present on a host computer to which the target device and the server are in communication (See for example, Item 32, in Fig. 1 of Kemp).

With regard to claim 6, the computer-implemented method of claim 1, further comprising an initial comparison of a property, i.e., object, of the first snapshot to a corresponding property of the second snapshot, wherein the initial comparison provides a pass/fail, i.e., add/remove, variable (Which broadly reads on items 108 and 110, in Fig. 4 of Kemp).

With regard to claim 7, the computer-implemented method of claim 1, wherein the visual output of the difference between the first snapshot and the second snapshot includes a highlighted pixel for each pixel that is different between the first snapshot and the second snapshot (See for example, col. 10, lines 32-37 of Hsu).

With regard to claim 8, the computer-implemented method of claim 1, further comprising providing a file that includes information regarding properties of the target device that corresponds to the first snapshot (See for example, item 50, in Fig. 2).

With regard to claim 22, the system of claim 19, wherein the output of the difference between the first snapshot and the second snapshot comprises a visual output (See Fig. 4 of Hsu) with a highlighted pixel for each pixel that is different between the first snapshot and the second snapshot (See for example, col. 10, lines 32-37 of Hsu).

#### ***Allowable Subject Matter***

7. Claims 3, 9-11, 20 and 23-25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Numbers: 6075529 and 6907546; and publications to: Memon, et al "Coverage Criteria for GUI Testing".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DANIEL G MARIAM  
Primary Examiner  
Art Unit 2624

July 6, 2007